

Our Ocean Backyard — *Santa Cruz Sentinel* columns by Gary Griggs, Director, Institute of Marine Sciences, UC Santa Cruz.

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California Fishing

In the middle of a fish dinner with friends, I often ask-What do you think is California's biggest commercial fishery? So before you read any further, find a pencil and piece of paper and jot down what you believe are the top 3 or 4, in tonnage.

What might not be obvious, the biggest catch doesn't necessarily produce the greatest income, simply because the price per pound at the dock varies enormously for different seafoods.

The California Department of Fish and Wildlife keeps close track of commercial fishery landings and then reports this on their website every year. Fisheries include everything extracted from the sea, whether fish or not. Crabs and lobsters, shrimp and urchins are all part of the soup.

While most of us non-ichthyologists probably think of a handful of common fish we see in the market as our main seafood products- things like salmon, sole, prawns, halibut, tuna, Dungeness crab last year, and a few others- the state keeps track of the commercial landings of 227 different species.

The list includes some bizarre things that most of us probably have never seen, don't eat, or haven't heard of: Monkeyface eel, shovelnose guitarfish, California lizardfish, longjaw mudsucker, oilfish, spotted ratfish, wahoo, warty sea cucumber, and 51 different kinds of rockfish.

So what's at the top of your California fishery list? The answer is surprising to almost everyone I've ever asked. Market squid is number one, year after year. These little cephalopods have made up about 2/3 of the total commercial catch each of the past five years, averaging about 123,000 tons annually. Some of the squid is used for bait, some goes into local fish markets and restaurants, but the great bulk gets exported.

Calamari has also been number one or two in total dollar value over the past five years, bringing in about \$70 million annually for the squid fishermen. You have to bring in a lot of squid to make much money, however. The price at the dock this past year was about 32 cents a pound. You also have to go out at night with bright lights to attract the spawning squid to the surface where they are netted.

At the other end of the value scale is the California spiny lobster, which averaged \$19.10 a pound at the dock and brought in just over \$18 million last year.

The closure of the Dungeness crab fishery isn't making anyone happy, and these crustaceans have been up near the top of our commercial fishery in recent years. Since 2010 they have ranked second or third in total tonnage, and first or second in value, averaging about \$67 million each year.

Moving down the 2014 catch list, squid was no. 1 in tonnage, followed by northern anchovy, Dungeness crab, Pacific sardine, Pacific mackerel, red sea urchin, and pink ocean shrimp, which together made up 89% of the entire commercial catch.

In dollar value, the list is a bit different, with squid still no. 1, but followed by Dungeness crab, spiny lobster, Chinook salmon, and red sea urchin, which combined generated 70% of the total income. Price per pound is a big factor with seafood products. Spiny lobster is a good example. These clawed crustaceans only amount to 0.3% of the total catch by weight, but brought in \$18 million or 7.2% of the total income.

Chinook salmon is another high value fish, at \$5.41/lb. at the dock. They brought in just over \$12 million or almost 5% of the commercial income, but only made up 0.6% of the total catch by weight. California halibut at \$5.50/lb. is another high value target, as are prawns at \$7.16/lb.

Then there are all those species where you need a big boat to haul in enough to cover your costs: market squid at \$0.32/lb., Pacific sardine at \$0.12/lb., Pacific mackerel at \$0.10/lb., and northern anchovy at \$0.07/lb.

We have an amazingly diverse seafood menu offshore, although as the closure of the crab fishery indicates, it is also a precarious food chain with some very strong environmental dependencies. We know we have disturbed many parts of the system, that natural fluctuations have had similar impacts, and now realize that careful and thoughtful management is essential for long-term sustainability.

If you are looking for the perfect holiday gift for someone who already has everything, you can get copies of Our Ocean Backyard- Collected Essays, which includes the first 6.5 years of these columns, at the Ocean Discovery Shop at the Seymour Marine Discovery Center and at Bookshop Santa Cruz.